Welcome

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It is a pleasure to be here with you this morning. I appreciate the opportunity to open this conference.

As you know, the subtitle for this conference is "technology options for producers' survival." For better or worse, it is an appropriate title – particularly when we emphasize the last word, "survival."

For the last several months, many of you – and many of your colleagues – have had to deal with that word, "survival." You have ridden a roller coaster of prices – again, like you did in the mid-80s and again in the early 90s. This time, however, the declines were steeper and more severe than at any time in post-war memory. And the upturns have been gradual and filled with uncertainty.

I'm not going to dwell on the last 18 or 19 months. You have lived through it. You have survived. The purpose of this conference is to look into the future...to discuss ways to avoid – or at least smooth out – the roller coaster rides that will inevitably strike this industry again.

Last December, when the price plunge was approaching its most severe decline, Secretary Richardson appointed an Oil Emergency Task Force. I was asked to chair it. We had a very clear mandate from the Secretary – it was NOT to prop up the domestic industry....or to find ways to artificially push up prices. A lot of people were confused about that.

The mission of the Task Force was to find ways to preserve the domestic production capacity of our domestic oil and gas fields....to look across the industry – and across the government – for ways to prevent a further erosion of our nation's domestic energy security. In other words, were there things we could do that would smooth out the roller coaster ride – not only today, but in the future?

That's why – even with the recent upturn in prices – this Task Force still has work to do. That's why – at the urging of Secretary Richardson – the White House created an Interagency Working Group on oil and gas matters. That working group continues to function today – working under the leadership of Gene Sperling, chairman of the National Economic Council, and his deputy Ron Minsk.

As many of you know, the DOE Task Force has already initiated some actions, several of which I will describe in a moment. I believe you are also going to see some additional actions come out of the White House Interagency Group. Several things have occurred in the last few weeks – even as the immediate crisis of low oil prices has abated somewhat.

For one thing, many people inside – and outside – the Administration are gaining a much better appreciation of the challenges you face. They are beginning to understand, for example, that oil reservoirs are not like an upside-down spigot. They are beginning to recognize that it isn't as simple as when prices go up, the spigot turns on and when prices go down, the spigot turns off. They are beginning to appreciate the fact that every time your industry goes through a roller coaster like the last one – or the one in the 80s – some part of our domestic resource is lost forever.

They are now beginning to understand that Infrastructure gets removed. Leases are lost. Fields are plugged and abandoned. And when this occurs, the resource in those fields – certainly a significant portion of it – is effectively and financially lost. It won't be produced under any reasonable price scenario – certainly not in the foreseeable future...perhaps never at all.

People both inside and outside the Administration are beginning to understand that what happens in the oil industry also affects natural gas. Twenty percent (20%) of the nation's natural gas production is linked directly to the production of crude oil. And a lot more of our domestic gas production is linked to investment decisions that are driven by crude oil prices.

So people are beginning to get a better appreciation for the fact that turbulence in the oil industry has some ominous impacts on whether this nation can meet some of its environmental goals – and do so affordably and reliably.

People are beginning to understand that, like any landowner, the Federal Government has a financial stake in the health of the domestic oil industry. Twenty-five percent (25%) of our domestic oil production and 37 percent of our domestic gas production comes from Federal lands. That translates into more than \$6 billion a year in royalties, bonuses, and rentals flowing into the U.S. Treasury. And, of course, States who share in those revenues, also have a financial stake in the upsand-downs of the industry.

Finally, people are beginning to appreciate that the U.S. oil industry of 1999 is not the industry of 1979 or 1969...or perhaps even 1989. It is a changed industry – both in its core make-up, and by extension, in its vulnerability to sharp price swings.

Today's domestic industry is increasingly an industry of independents. Fifty percent (50%) of the crude oil and 60 percent of the natural gas produced in the lower 48 States is produced by independent companies, 90 percent of whom employ 20 workers or less. These companies – many of you in this audience – drill 85 percent of all new wells in the United States.

Fifteen or 20 years ago, an industry dominated by major, multinational companies had the resources to wait out the "bust" cycles. They could remain solvent while awaiting the next "boom." But that is no longer the case in this industry. You know that better than any one. Many in your industry are walking a financial tightrope – and when prices plunge, so do they.

These are factors that exist in your industry that many people don't fully appreciate. Together, they add up to a direct impact on this Nation's long-term energy security....and that means an impact on this Nation's long-term economic security.

Many people appreciate the need to diversify world oil supplies. They recognize that with oil imports likely to grow to 65 percent of domestic consumption in the next 20 years – or perhaps even 70 percent or more if prices stay low – it is in our national interest to support efforts in the Caspian and in central Asia to bring in new supplies.

Throw into that equation the forecast that the Persian Gulf could regain control over half of the world's oil for export in 10 years, and the energy security argument is strengthened.

But few people fully appreciate that the crude oil produced in THIS country by small independent producers is about the same quantity as the oil we import from Saudi Arabia or Venezuela. If the flow of oil from those countries was threatened, a lot of people would sit up and take notice. What we are doing in the interagency process is trying to impress upon people that they should sit up and take notice when an equivalent flow of crude oil from KNOWN fields within our own borders is threatened. And I believe we are having some success.

Now, let me turn to some of the things we are doing – and specifically those things that relate directly to the theme of this conference "technology options for producers survival."

When we put out our first description of oil initiatives being developed by the Emergency Oil Task Force back in February, we outlined four overarching strategies:

One, enhancing America's energy security, primarily by taking advantage of low oil prices to begin refilling the Nation's Strategic Petroleum Reserve; Two, preserving domestic oil and gas production capacity; Three, finding ways to lower the costs of production, and Four, improving government decisionmaking.

At the heart of two of those strategies – preserving production capacity and lowering costs of production – is technology. We are a big believer in technology – not just because it's what we do in the Office of Fossil Energy, but because of the results we have seen.

Who could have anticipated or even imagined in the 1970s and early 1980s the potential of new technology that now exists within the industry?

Daniel Yergin and Joseph Stanislaw, president and managing director, respectively, of Cambridge Energy Research Associates, wrote an article in the LA Times a little over a year ago in which they said that (quote) "Oil is a prime example of an industry transformed by the computer" (unquote).

They cited computer imaging and visualization technologies that Hollywood has used for films like "Jurassic Park" that are now being applied to oil exploration and production.

Without computer design, it would be too costly, they stated, to build the huge platforms necessary to drill in deep waters offshore.

I would add that without computer processing, it would also be far too difficult and unreliable to "see" beneath the salt structures in the Gulf where there appears to exist potentially huge new oil and gas resources.

Today, because of computer technology, we not only have affordable 3-D seismic but also 4-D seismic, which adds time to the equation. 4-D seismic is now a half-billion dollar industry in the Gulf. And I'm proud to say that it was a government-industry partnership that brought the technology out of the research stage and moved it across the commercial threshold.

These are remarkable achievements. But as important as they are to future exploration and production in our domestic lands and waters, they are by no means the full extent of what we should be focusing on.

We have to remember the changing make-up of the domestic industry. We have to recognize that technology improvements that once flowed from majors to independents doesn't move as quickly or, in some cases, at all in today's circumstances.

That's why we are targeting a large part of our program to assist smaller, independent oil operators develop and gain confidence in new or improved technologies.

That's why we continue to support the Petroleum Technology Transfer Council and the excellent work it is doing in conveying technology and other assistance to independents in its 10 regions.

Last week, we announced 7 new grants to independent oil producers – those with less than 50 employees – to encourage the use of technologies that can keep oil flowing from domestic fields. Technologies range from the use of water-jet technology for lateral drilling to the use of new types of tracers to the installation of remote solar-powered monitoring equipment to gather well data.

These awards were the first of a series of cost-sharing grants we intend to provide to small operators. In the next few weeks, a second round of awards will be announced. And for those who are interested in this program, you still have until August 31 and November 30 to submit your applications for future grants.

We have also reopened our Reservoir Class Field Program. This was an effort the Department began in 1992 to encourage domestic producers – both large and small – to adopt technologies that could prolong the economic life of some of our most endangered oil fields.

The first 3 rounds of this program have produced some excellent results. I mentioned 4-D seismic earlier, which is a product of this program. I was also particularly pleased to see that this month, Hart's Publications – one of the industry's leading publishers, as many of you know – recognized four of the Reservoir Class projects in its "Best of Class" awards. A fifth award came from our R&D program.

Now we beginning to evaluate a new group of proposals -27 in all - and we expect to announce about \$18 million in Federal cost-sharing later this summer.

Technology is also at the heart of a new partnership we have created with the National Association of State Energy Officials. We are bringing together oil producers and electric power companies in a pilot program that offers utility financing for more energy efficient production equipment.

This is an effort that has paid dividends in terms of reduced costs in small field tests – in Kansas, for example. Now, we're expanding the effort with workshops in California, New Mexico, and Utah – and more to follow. An efficiency guide for producers is scheduled to be completed this summer.

Finally, we are initiating a pilot program here in Texas that will replace reams of paper forms with a cost-saving on-line digital processing system. If this approach is successful, oil and gas producers may soon be able to complete and submit electronic permit applications by Internet.

Over the course of this conference, you are going to hear more about these and other initiatives – all with a focus on technology not only for the short-term, but also for the longer-term.

Just as we have to be concerned with ways to ensure your survival today, we must also prepare for the era 20 or 25 years from now when we will need to rely increasingly on deeper, more complex reservoirs or perhaps formations – like gas hydrates – that are beyond the reach of today's technologies.

We are committed to these types of near- and long-term technology efforts. We believe the track record shows that these efforts produce results – meaningful results that directly benefit your industry and, in turn, benefit the energy and economic security of this country.

But as I said earlier, a large part of this is education – ensuring that people understand WHAT we are doing, WHY we are doing it, and WHAT BENEFIT we are trying to achieve.

That is why we are preparing to publish in the next few weeks a comprehensive description of our entire energy R&D portfolio – not only our efforts in oil and gas exploration and production, but also our efforts in alternative vehicles, in the development of more efficient gas turbines, in fuel cells and solar energy, in coal...and wind...and geothermal.

Until now, no such description existed. No one – in the Administration, on Capitol Hill, or in the industry – could pick up a single document and get a FULL picture of the spectrum of research

conducted by the Department.

Why is this important? Because we need to understand whether our portfolio is balanced, whether it meets our broader national policy goals, whether we have an adequate road map to achieve those goals, and whether our dollars are going into the right areas.

The Energy R&D Portfolio we will publish in the next few weeks has taken a year to produce. But if we are going to convince those in Congress – as well as those of you in industry – that government R&D partnerships pay off, we need to be able to describe those partnerships and show how they fit together. So, in many ways, this portfolio will be another education tool – both for us and for others.

Our goal is to maximize the full potential of America's energy strengths. And oil and gas are two of the resources that are vital to that strength.

But another of those strengths – in many ways, a strength unique to this country – is the partnerships we have in research and development between government, industry and academia.

These partnerships are the product of education also. You must know what we are doing. We must know what you need.

Our roles must be based on communication and interaction -- not only in the field but in workshops and conferences like this. That's why we have put this conference together. It will help us identify – as partners – where we should be going in the future....what are the right combination of policies and programs...where are the gaps and how best do we fill them.

In other words, what it will take in terms of technology for you to "survive in the 21st century." I am extremely pleased that you have taken the time to join us here this week.

Thank you very much.